

Loucas Christophorou named Carbide Corporate Research Fellow



Christophorou

Loucas G. Christophorou, ORNL Health and Safety Research Division, has been named a Corporate Research Fellow of Union Carbide.

In announcing the honor, Roger F. Hibbs, President of the Nuclear Division, explained that designation as a Corporate Research Fellow is made by Union Carbide on a limited basis to those who have chosen research and development as a career and whose contributions have been both significant and continually high over a period of years.

Christophorou was recognized for his leadership in the areas of atomic

and molecular physics, chemical physics, radiation physics and chemistry, electron and ion physics, photo-physics, and high-voltage physics. His program on electron-molecular interactions and negative ions is one of the most comprehensive in the world.

Christophorou organized and chaired the first and second international symposia on gaseous dielectrics. He recently was elected a correspondent member of the Academy of Athens, Greece.

A native of Cyprus, Christophorou received his master and doctorate

degrees from the University of Manchester, United Kingdom. He joined the staff of the Nuclear Division in 1963 and is currently head of the atomic, molecular and high-voltage physics group in the Health and Safety Research Division. He also is a physics professor at the University of Tennessee.

Christophorou holds an honorary DSc degree from the University of Manchester and is a Fellow of the American Physical Society and the American Association for the Advancement of Science.

He and his wife, Eratoula, live at 121 Nebraska Avenue, Oak Ridge. They have two daughters, Penny and Ioanna.

UNION
CARBIDE

Nuclear Division News

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EFFECTIVE COMMUNICATION — Few of us are adept at communicating with persons who cannot hear or have some hearing deficiency. Irma K. Young, an assistant professor at Maryville College, has been giving elementary courses to Affirmative Action Representatives at Y-12 recently. These seminars include basic signs in communications. Below she gives the universal sign of "I love you," as the representatives answer back.



Wasted heat utilized to warm buildings at Paducah Plant

A process waste heat utilization project now underway at the Paducah Plant will enable the plant to utilize some of the waste heat which is currently emitted from the plant's water cooling towers.

The heat generated by gas compressors used in the enrichment process at the Plant is removed by a cooling system which includes recirculating water. The heat which the water captures is ultimately discharged through the cooling towers in the form of pure water vapor.

Through the utilization project, this hot recirculating water will be directed to six plant buildings totaling in excess of 630,000 square feet. A pumping station will be located near one of the four process buildings with a capability of approximately 10,000 gallons per minute. After being used to heat the buildings, the distribution system allows the water to return to the process cooling system.

The water will flow through approximately 34,000 feet of piping ranging in size from one to twenty inches in diameter. Since the hot water temperature is much lower than the steam it is replacing, unit heaters in the affected buildings are being modified or replaced.

The steam used to heat the building at present is generated by burning coal. With utilization of the process waste heat, approximately 190 million pounds of steam will be saved per year. This amounts to \$650,000 in 1979 energy costs based on \$3.97 per million Btu's. The reduction in fuel consumption will result not only in fuel cost savings, but also in reduced emission of sulfur dioxide, oxides of nitrogen, and particulates from the plant's steam production.

The project, begun in 1978, will cost \$5,700,000 and is scheduled for completion by late summer of this year. "We estimate the project will pay for itself in about 10 years," said Dale Kahre, project engineer.

The Paducah Plant is the first of the four Nuclear Division facilities to utilize process waste heat in a comprehensive heating system.

Inside ...

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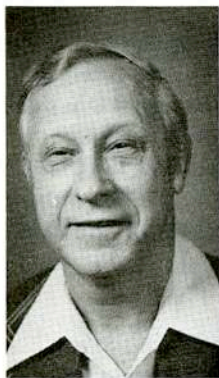
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Recent Retirements



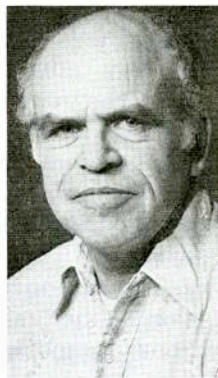
Alvin L. Sharp
Operations
ORGDP
35 years service



Myer Bender
Engineering
ORNL
34 years service



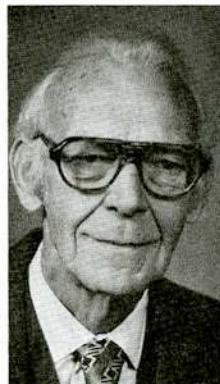
Samuel M. DeCamp
Fusion Energy
ORNL
29 years service



Harold C. Sanderson
Fusion Energy
ORNL
23 years service



James E. Bradshaw
Finance, Materials
& Services
ORGDP
36 years service



Donald D. Johnson
Fabrication and
Maintenance
ORGDP
29 years service

Clora L. Cawrse
Information
ORNL
33 years service

Margaret T. Guthrie
Instrumentation and
Controls
ORNL
31 years service

Savings Plan-Personal Investment Account

	Fixed Income Fund	UCC Stock	Equity Investment Fund
December 76	13.0553	59.2723	8.8166
December 77	14.2017	40.9096	8.0427
September 80	18.0487	46.4911	11.7894
November 80	18.3161	48.8017	13.2537
December 80	18.4490	49.2140	12.9061
January 81	18.5946	53.9691	12.4473

Note: Fixed Income Fund unit values reflect interest additions to achieve the guaranteed effective annual interest rate of 9.75% for 1981. Union Carbide stock values are the average cost of stock purchased during the month. Equity Investment Fund unit values represent the month-end market value of securities held by the Fund. The price of each unit is determined by dividing the total value of the securities by the number of units in the Fund.

From DOE

Ten ways to save home energy

The Department of Energy provided the following tips for saving energy around the house:

- 1) Turn down the thermostat. Dress warmly.
- 2) At night, lower the thermostat 5 more degrees, and close drapes.
- 3) Insulate walls and the attic.
- 4) Caulk and weatherstrip doors and windows.
- 5) Install storm windows or put

up clear plastic window coverings.

- 6) Insulate the water tank, and set it at lowest effective temperature.
- 7) Wash laundry with low water temperatures; rinse with cold.
- 8) Install a shower flow controller.
- 9) Turn off unneeded lights and appliances.
- 10) Turn off dishwasher before dry cycle and air dry.

Save Energy / Share the Ride

ORNL

RIDER in van pool from West Knoxville, to South or West Portal, straight day. Mike Caldwell, plant phone 4-4885, home phone Knoxville 691-4194.

RIDE NEEDED from Halls (Black Oak Apartments) to East Portal, 8-4:30. B. F. Waller, plant phone 4-6890.

RIDE NEEDED from Oak Ridge Highway between Karns and Solway to East Portal, 8:15-4:45. Peterson, plant phone 4-4483; home phone 690-3989.

CARPOOL RIDERS WANTED from Concord (Kingsgate Subdivision) to East or North Portal, 8-4:30. Nell Jones, plant phone 4-4405; home phone 966-8307.

ONE CAR POOL member from Karns Community to North Portal, 8-4:30 shift. B. A. Cooper, plant phone 4-3429, home phone Knoxville 691-8411.

RIDER from Whittle Springs, Norwood area, to any portal, J Shift. Jim Morgan, plant phone 4-3476, home phone Knoxville 523-6334.

JOIN CAR POOL or VAN POOL from Maryville to Bear Creek Portal, G Shift. Carl Cardwell, plant phone 4-2679, home phone Maryville 981-0251.

BUS POOL forming from Rockwood, Midtown and Kingston to any portal, 8-4:30 shift. Tommy Roberts, plant phone 4-0887, home phone Rockwood 354-2789.

Y-12

TWO/THREE RIDERS from Harri-man area to any portal, E Shift. David Baker, plant phone 4-3349, home phone Harriman 882-3394.

RIDE from intersection Gallaher Road/I-40 (Family Inn Motel) east of Kingston to Central or North Portals, 7:30-4:00. W. A. Farmer, plant phone 4-3749, home phone 376-9916.

ORGDP

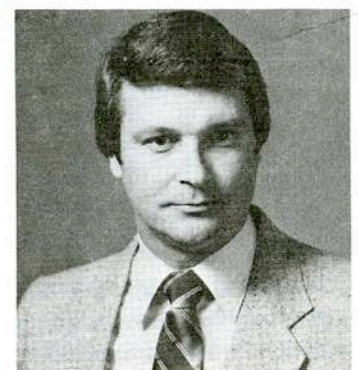
ONE RIDER to fill van pool from Oliver Springs to Portal 2, straight day. Linda Chadwick, plant phone 4-8222; home phone Oliver Springs 435-6907.

CAR POOL MEMBERS from Broad Acres, Powell, to Portals 1 and 2, straight day. John Hoffmeister, plant phone 4-8113, home phone Powell 938-6755.

Patrick D. Guettner named ORGDP quality specialist

Patrick D. Guettner has been named a quality specialist in the Quality Assurance Department.

He joined Union Carbide at Y-12 in 1970. After a return to school, he joined ORGDP in 1976 in the Maintenance Division. For the past year he has been QA coordinator for the Maintenance Division. Guettner holds a BS degree in mechanical engineering from the University of Tennessee and a law degree from Memphis State University. He belongs to the American Society for Quality Control; Civil Air Patrol, commanding the Roane County Squad-

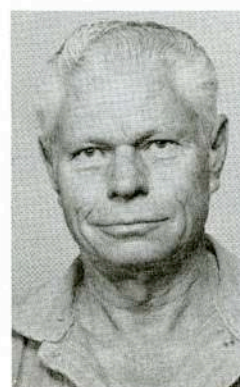


Guettner

ron; and is chairman of the Kingston Regional Planning Commission.

He and his wife, Devera, live in Kingston.

Division Death



Mr. Sargent

Stephen J. Sargent Jr., a machinist in Y-12's Fabrication Division, died February 6 in a Knoxville hospital. He joined Union Carbide at ORGDP in 1952 and came to Y-12 in 1961.

Survivors include his wife, Dell Sargent, 1036 West Parkway Drive, Knoxville; children, Michael and Stephen Sargent, Patricia Buchanan and Judy Hazelwood; brother, Edward; and seven grandchildren.

Funeral services were held at the Rose Funeral Chapel with burial in Highland Memorial Cemetery.



Medicine Chest

The AMA and medical standards

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," **NUCLEAR DIVISION NEWS**, Building 9704-2, Stop 21, Y-12, or call the news editor in your plant, and give him or her your question on the telephone.)

QUESTION: Please discuss the role of the American Medical Association (AMA) in developing the high standards of medical education in the U.S. Although other professions, for example, law, engineering, etc., have their own organizations, it is my impression that they have had far less impact on their profession's standards than the AMA has had on the practice of medicine.

ANSWER: Your question has been paraphrased, because somehow I misplaced your letter. I am hesitant to discuss the AMA because readers will assume I am biased. I am, but if you will allow for my bias, you may find the following information interesting.

The condition of medical education at the turn of the century was dreadful. There were many medical schools, but few maintained adequate standards. The flood of poor-quality medical schools began in

1807 with the establishment of medical schools by the Medical Society of the County of New York. During the next 69 years, 77 medical or homeopathic schools were established. Most of them were proprietary schools associated with large hospitals and were little more than "apprentice shops."

In 1908, Abraham Flexner, an educator from Johns Hopkins University, was assigned the task of evaluating medical education by trustees of the Carnegie Foundation for the Advancement of Teaching. His report, "Medical Education in the United States and Canada," was issued in 1910 and began a revolution in medical teaching and practice. He recommended closing many schools or requiring them to be integrated into major university departments. He recommended a standard curriculum, a longer premedical education and the development of a close relationship between teaching and research.

The AMA's Council on Medical Education has since reviewed U.S. medical schools for the purpose of ensuring quality medical education. In 1942, the AMA Council and the Association of American Medical Colleges established a Liaison Committee on Medical Education which became the official accrediting body for educational programs leading to an MD degree and also the accrediting body for the Department of Education.

New medical standards

When physicians were in short supply following World War II, the AMA was accused of slowness in helping to establish new medical schools. High standards could have been easily sacrificed in the "crush" to increase the supply. Nevertheless, the number of physicians has increased dramatically. There were 6,135 graduates in 1950-51, while in 1979-80 there were 15,135. Many medical economists now say that it will be difficult to continue to support some of the medical schools added in the past 10 years, because there is an oversupply of physicians. An oversupply apparently increases rather than reduces the cost of health care delivery.

Accreditation practices

It is still difficult to get into a medical school. In 1960-61, 59.4% of applicants were successful. In 1973-74, the rate dropped to 35.4%, and now it is 46.7%. However, approximately 90% of first-year students eventually graduate. The high standards for admission apparently discourage potential students with modest qualifications from even applying.

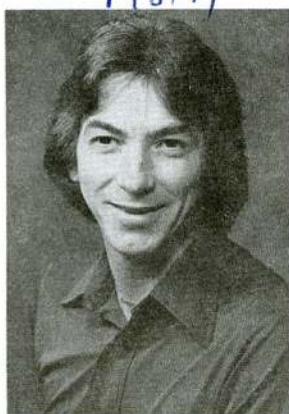
The AMA is a member of the Joint Commission on Accreditation of Hospitals and also accredits the schools and training programs for physical therapists, medical technologists and inhalation therapists.

The AMA Council on Medical Education also accredits institutions meeting minimum standards for providing continuing education for physicians. Almost 9,000 approved courses are listed once a year in the AMA's weekly scientific journal, *The Journal of the American Medical Association*. The AMA also publishes nine other monthly scientific journals.

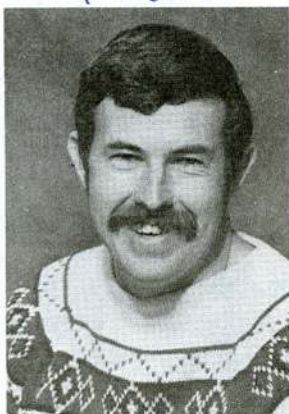
Providing references

To assist the physician in his practice and research, the AMA maintains one of the largest medical libraries in the country. It subscribes to over 2,500 journals in medicine and allied health sciences and has a collection of 60,000 bound volumes. Any physician may contact the AMA Library and receive computer searches and photocopies of articles needed. The Library maintains the most comprehensive collection in the world on the sociology and economics of medicine.

Although some of the political activities of the AMA might cause resentment, few will deny that the AMA is a major influence in science and education in medicine. A few physicians obviously don't keep abreast of the many changes in medical practice that occur each year, but it is not because resources are unavailable.



Jackson



Jimmerson

Jackson, Jimmerson receive promotions at Y-12 Plant

Donald T. Jackson has been promoted to a machining supervisor in Y-12 and Harold K. Jimmerson has been named an engineering aide.

Jackson, a native of Edenton, N.C., joined Union Carbide 10 years ago. He attended State Vocational School in Chattanooga and worked for the Oster Corporation prior to that time.

Mrs. Jackson is the former Donna Jeane True, and the couple lives at Route 1, Spring City. They have three children, Shelley, Marc and Melinda.

Jimmerson was born in Knoxville and attended Carson Newman College, Roane State Community College and the University of Tennessee prior to coming to Y-12 in 1977. He worked for Jim's TV and Appliances for seven years before that, and is a member of the Tennessee National Guard.

He and his wife, the former Mary Vance, live at Route 17, Guinn Road, Knoxville. They have two children, Luke and Rachel.

United Way helps all year



THANKS TO YOU — Your United Way dollars are helping others throughout the entire year, not just during the annual fall campaign. This children's day camp, held last summer in Oak Ridge, was sponsored by the Anderson County Association for Retarded Citizens (ACARC), and funded entirely by the United Way. During the two-week camp, the students participated in various outdoor activities, including swimming, horseback riding and nature study. Among the volunteers at the camp was Joe Sawicki (standing at right), ORGDP Maintenance Division, who has served as ACARC secretary.

UCC's earnings up slightly from previous year

Union Carbide Corporation has reported preliminary net earnings for 1980 of \$672.5 million, up slightly from comparable 1979 earnings of \$671.1 million.

Earnings per share, based on a larger number of shares outstanding, were \$10.08, one and one-half percent below comparable 1979 earnings of \$10.23 per share.

Including a nonrecurring credit of \$217.3 million taken in the first quarter, as a result of a change in method of accounting for the investments tax credit, net income for the year was \$889.8 million, or \$13.36 per share.

Fourth quarter earnings of \$148.9 million, while down seven percent from fourth quarter 1979 comparable earnings of \$160.4 million, included a nonrecurring special charge of \$26.6 million (equivalent to 40 cents per share) accrued against the divestiture of a portion of the company's metals business. The company stated that this previously announced divestiture is progressing with the objective of concluding it in the second quarter of 1981.

Earnings per share for the quarter (including the nonrecurring loss of 40 cents per share) were \$2.21, versus \$2.43 per share earnings on a comparable basis for the 1979 fourth quarter.

"Despite major recessionary pressures and the special charge in 1980," said William S. Sneath, Union Carbide chairman and chief executive officer, "the company was able to maintain earnings at the prior year's level. This kind of performance was due, in large part, to the successful operation of a portfolio of businesses that are well-balanced geographically and well-balanced by product line."

UCC retirees enjoy southern tour — plan yet another one

Retirees approach spring like fury. The Carbide Retirees Association is still telling good stories about the November trip through Alabama, and Mississippi and culminating in a stay in New Orleans.

Old mansions, a tour of the Superdome, a night at the theater (Richard Burton in "Camelot") and gourmet meals in the French Quarter highlighted the tour, participants say.

Another trip

Now there's another tour in the making...five nights, six days, beginning April 6. This one's called Azelea Trails, and will take in places like Savannah, Ga., Charleston, S. C., Warm Springs, Callaway Gardens, Ballenrath Gardens, Middleton Place, Ft. Sumpter, and dozens of old plantation homes along the way. The total cost is \$250 per person...with a \$25 deposit now, and the remaining amount due March 10.

The \$250 cost includes everything for the tour except meals, with all travel and lodging included.

Additional information may be obtained from Virginia Donahoe, extension 6-1786. (There's a limit of 40 persons for the tour, and Donahoe says about half the space is already gone...so immediate action is urged.)

Golf set

UCRA is also planning golf for the spring and summer. It will take place Mondays at South Hills and will be

played on the first nine holes. Don Matlock, Oak Ridge telephone 483-6732, is handling all these arrangements, so get in touch with him if golf is in your plans. There will be special instructions for beginners, Matlock says.

Carl Frazier is still holding court at Tri-County Lanes every Monday at 1 p.m. for bowlers in the association.

Meanwhile, the association is renewing current memberships and seeking new ones, as always. An application appears at right for those who have not yet joined.

Two reunions are already set for the year at the Clark Center Recreation Park...Fridays, May 22 and September 25.

Membership dues are \$1 per retiree, or \$2 for retiree and spouse. Widows and/or widowers of employees are also eligible to join, UCRA officials state. Additional information may be obtained from the office.

Please complete the attached form and join in on the fun. Retirees are hoping to hit the 2,000-member level this year!



A tour of the Superdome



RETIREEES ON TOUR — Union Carbide Retirees Association enjoyed a November tour through Alabama, Mississippi and Louisiana, with the climax of the whole tour in old New Orleans. They visited many historic sites, saw "Camelot," and got back ready to go again. They are seen here on the steps of the old Confederate Capitol in Montgomery.

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Nuclear Division News

UNION CARBIDE CORPORATION
NUCLEAR DIVISION
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ORGDP

Ruby A. Miller, 574-8093

PADUCAH

Darlene M. Mazzone, Bell 208



INTERNATIONAL ASSOCIATION
OF BUSINESS COMMUNICATORS



French Quarter — New Orleans

UNION CARBIDE RETIREES ASSOCIATION

Membership Application

Fee: \$1 Retiree and spouse \$2

Name _____
Spouse _____
Address _____
City _____ State _____ Zip _____
Telephone—Area Code _____/Number _____

(Please note if applicant is widow or widower. Fill in "Spouse" line with deceased employee's name, year of retirement and plant from which retired.)

Retired from:

ORGDP _____ ORNL _____ Y-12 _____

Paducah _____ Staff _____

Indicate Participation preference:

Golf _____ Painting _____
Travel _____ Christmas Party _____
Other Activity _____ Swimming _____
Bowling _____ Bridge _____
Reunions (2/yr) _____

Suggestions:

Make check payable
to:

Union Carbide
Retirees Association

**UNION
CARBIDE**

Mail to:
P.O. Box 3501
Oak Ridge,
Tennessee 37830

or

P.O. Box 238
Paducah, Kentucky
42001

**UNION
CARBIDE**

Anniversaries

Y-12 PLANT

35 YEARS

James S. Cole, Product Engineering; Joel C. Thomason, Plant Laboratory; and Forrest B. Waldrop, Development Division.

25 YEARS

Carol A. Proaps, David L. Laughlin, William E. Cunningham and William J. Boegly Jr.

30 YEARS

Thomas K. Bishop Jr., and Donald L. Anfinson, Engineering; J. R. Barkman, Chemical Services; Brice M. Burrus, Standards and Surveys; John R. Gresham, General Shops; John McGhee, Material Transfer and Packing; Kenneth L. Prewitt, Dimensional Inspection; William T. Arrowood, Graphite Shop; Carl G. Brewster, Medical; Carl H. Dorr, A Wing, H2 and F Areas; Toney V. Gable, Production Coordination; James F. George Jr., Guard Department; Max Whitley, General Shops; Willie L. Parton, Buildings, Grounds and Maintenance Shops; and Carl A. Slaughter, General Shops.

25 YEARS

Robert W. Johnson and Gaines Aldridge.

ORNL

35 YEARS

George S. Sadowski Sr., Instrumentation and Controls; Raymond W. Tucker, Instrumentation and Controls; and James H. Cummings Jr., Finance and Materials.

30 YEARS

Sheldon Datz, Chemistry; Ernest E. Parks, Plant and Equipment; Merl M. Houser, Plant and Equipment; and Roslyn W. Bridges, Information.

ORGDP

35 YEARS

Bruce J. Bogardus, Operations; George Leever Jr., Jack Smith, Billy H. Bramblett, Virgil T. Murphy, Perry B. Smith, Noah E. Hoard, James A. Walls, all from Maintenance; Charles E. Newlon, Eli Y. Kimmerly, Technical Services; Thomas F. Mullinix, William H. Moore, Engineering; and Paul M. Osborne, General Accounting.

30 YEARS

William Grumbach, William Halchin, Margaret S. Stewart, Engineering; Henry B. McBride Jr., Computer Sciences; Jack L. Gamble, Operations; Robert R. Snyder, Barrier Manufacturing; Mary P. Jones, Paul E. Riedel Jr., Technical Services; Charles R. Williams, Maintenance; and Mary G. Culbertson, Separation Systems.

25 YEARS

Harry Thornton and James A. Corn.

20 YEARS

Jackie E. Myers and George A. Adams.

PADUCAH

35 YEARS

Robroy Millican, Fabrication and Maintenance manager.



ACCEPTING BLOOD AWARD—Accepting the Red Cross's blood award are members of the Paducah Plant's blood program committee. From left are Ophelia Oliver, Finance and Materials; Charlene Dawes, Shift Operations and Plant Protection; Lavon Pease, Fabrication and Maintenance, and program chairman; Delores Allen, Technical Services; J. O. Dobson, president of the local Plant Guard Workers of America union; and Linda Sherman, a coordinator from the Nashville Regional Red Cross Blood Center in Paducah.



TOASTMASTERS — Nuclear Division staffers officiate for the Oak Ridge Toastmaster's Club for 1981. From left are Bert Niemann, administrative vice president; Dean Oen, president; Hap West, secretary; I. T. Littleton, educational vice president; and Owen Killeen, treasurer (not shown). The club meets every Monday at 5:45 p.m. at the Alexander Motor Inn, and welcomes any interested parties.

Volleyball Leagues...

Final standings in the Volleyball Leagues have been announced. The Net Profits took the crown in the Carbon League-North; the P.O.I.'s in the Carbon League-South; as the Nuclear League went to the Hawks by one game.

A tournament was in session recently to determine winners there and results will be announced later.

Final standings:

CARBON LEAGUE - SOUTH DIVISION

Team	Won	Lost
P.O.I.	37	8
Buccaneers	32	10
Killer Bees	34	11
Foul Plays	29	10
Manipulators	31	14
Cornered Rats	26	16
W.G.A.S.	22	14
The Gamblers	20	19
Bombers	19	23
Odds & Ends	18	24
The Horibas	16	23
Mustangs	15	24
Short Circuits	13	26
Abends	6	33

NUCLEAR LEAGUE

Team	Won	Lost
Hawks	40	2
Con-Fusion	39	3
Dipsticks	31	11
Artie's Army	27	12
Dirty Half Dozen	22	11
Maxwell Demons	17	19
The Lobbers	16	26
Panthers	12	24
Gluons	12	27
Absolute Zeros	11	28
Volleyers	4	32

CARBON LEAGUE - NORTH DIVISION

Team	Won	Lost
Net Profits	42	3
Environmental Disasters	36	6
Lucky Spikes	33	9
Prime Time Players	30	9
Condensed Matter	24	15
The Spikers	22	17
The Zoo Crew	23	19
Carriers	20	19
Wild Turkeys	21	21
High Ballers	14	25
Net Heads	14	28
Zodiacs	12	33
"Tapeworms"	10	29
Sluggers	10	32
Bio Rejects	9	30
Thumpers	7	35

Hi Power Rifle...

The tentative schedule for the 1981 High Power Rifle League is as follows: April 11, 25, May 16, 30, June 27 and July 25. Further details may be obtained from the Recreation Department, 4-1597.

Around the alleys...

ORNL C League...

The Hit Men hang onto the lead in the ORNL C League, ahead of the Timberwolves, as the Easy Rollers and Pin Heads assume third and fourth slots. The Knuckleheads' 3178 took a weekly high recently, as their Moneyhun rolled a 689 series. The Easy Rollers' McKnight rolled high singles of 258.

ORNL A League...

ORAU still has the top spot in the ORNL A League, rolling better than the Half Frames and Turkeys. Mel Koons' 721 was high series recently, and his teammate Young rolled second high with a 587. The Turkeys' Callahan took a high single, rolling a 244.

K-25 Wednesday...

The Amps keep a firm grip on the K-25 Wednesday Night League, inching out the Planners and Demons. Lou Finley put a 708 series up recently, and Chuck McCluskey rolled a 688. High team rolling went to the league-leading team, as they totaled a 3161 handicap series.

K-25 Tuesday...

The Mishaps happen to be in first place in the K-25 Tuesday League, barely in front of the Atoms and All Stars. The Team's 3158 remains a season high, however, as the Mishaps' 3140 is second. J. W. Stapleton recently rolled a 571 series for individuals highs.

Y-12 C League...

The Sunflowers, Anodes and Favorite Five are all locked in a tie for first place in the Y-12 C League. The Anodes' 3062 was high early this month, and Bob Tinkle rolled a 283 handicap game. Bill Johnson put a 721 series up in the high score board.

UCC Mixed...

The Lickity Splits and Safeguards are tied for the lead in the UCC Mixed League as competition reaches the halfway mark in the second half. The Go Getters also are only one game removed from the lead. Rolling Stoned's 2599 series is still high in handicap scoring.

Carbide Family Mixed...

Oops and Hits & Misses are locked for the lead, as the Pin Ups stand in the wings, only one game removed from the lead. Don Carpenter's 594 scratch series and Edith Duckworth's 568 still stand as highs.

UCC Monday Night...

The Roadrunners take command of the UCC Monday Night League, moving in front of the Lucky Strikes and Free Spirit combo. The Four Eagles' 2401 was high recently as R. Igou put a 690 score up also.

ORGDP Women's...

The Guttermaids still hang in there in the ORGDP Women's League, as the Spotters move up within sight on the lead. Elaine Griffies rolled a 212 scratch game recently, and a 587 scratch series. The Pickups put up a high handicap game of 832...as the Spotters rolled a 2354 handicap series.

Y-12 Classic League...

The Ridgers keep a two-game lead in the Y-12 Classic, as the Eightballs and Atta-Boys move up. Jack Spears rolled a 662 series recently to take weekly high money, as Royal Cline put a 265 single game up.



CHAMPION PUMPERS — The Paducah Plant Pumpers captured the 1980 bowling championship. Team members, from left, are E. R. Charvat, Charles Burdette, Doug Foley, Glenn Young, Al Dobbins and A. K. Freels, captain. The Pumpers took advantage of experience, since three of the team have been bowling together for more than 20 years.

Safety Scoreboard

Time worked without a lost-time accident through February 19:

Y-12 Plant	150 Days	5,113,000 Employee-Hours
ORGDP	153 Days	4,541,527 Employee-Hours
ORNL	284 Days	6,639,188 Employee-Hours
Paducah	211 Days	1,898,699 Employee-Hours

News About People



Hobbs

Randy W. Hobbs, ORNL Operations Division, was one of three University of Tennessee nuclear engineering graduate students who submitted the winning entry in the 1980 National Graduate Student Design Competition sponsored by the American Nuclear Society. Hobbs and the others shared a cash award for the entry, entitled "Design of Liquid Level Detection System for a Pressurized Water Reactor." They also were guests of the Society at its national winter meeting in Washington, D.C.

Martin S. Lubell, head of the magnetics and superconductivity section in ORNL's Fusion Energy Division, has been elected the first president of the Applied Superconductivity Conference, Inc. (ASC), a new national organization formed to coordinate biennial meetings on the subject of superconductivity. He will serve a two-year term.

Although the principal activity of the ASC board will be to select a site and chairman for the biennial conference and to oversee the operation of the conference and publication of its proceedings, Lubell said he hopes to initiate both a quarterly newsletter and a monthly journal on applied superconductivity and magnetism.



Lubell

Management of the ASC will be by an 18-member board of directors and 3 ex officio board members.



Tucker



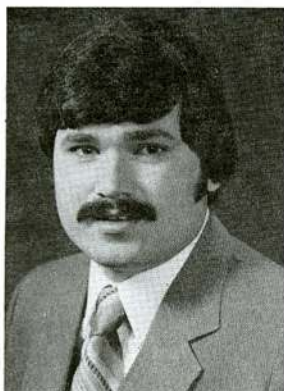
Schimmel

Two Nuclear Division accountants have been honored by the Knoxville Chapter of the National Association of Accountants. Guy V. Tucker Jr. and William E. Schimmel were

named to the "NAA 25-er Club," for their 25 years contribution to the association.

Schimmel, a 34-year Carbide veteran, is audit supervisor and has been a member of the Auditing Division since it began in 1952. He and his wife, Ouida, live at 128 Baltimore, Oak Ridge.

Tucker is manager of the Nuclear Division Systems and Procedures Department of the General Accounting Division. He is responsible for the development of the accounting manuals, the UCC-ND Standard Practice Procedures, Records Management, Forms Management, Word Processing Center and the administration of Tennessee sales and use tax program. He and his wife, Mary Frances, live at 1405 Bonita Drive, Knoxville.



Oakes

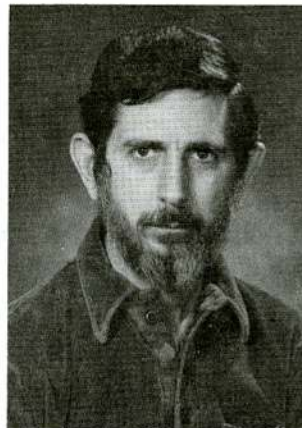
Thomas W. Oakes, environmental coordinator and head of the Department of Environmental Management in ORNL's Industrial Safety and App-

lied Health Physics Division, has become a Registered Professional Environmentalist. He has also been appointed to the Air Pollution Committee for the American Industrial Hygiene Society.

Oakes, who previously was a section head in the former Health Physics Division, has been with Union Carbide since 1975. He holds bachelor and master degrees from Virginia Polytechnic Institute and State University and a master's degree from the University of Tennessee. He is currently working on his doctorate at UT.

Oakes and his wife, Terri, live at 1208 Buxton Drive, Knoxville.

James B. Richmond named supervisor of photography



Richmond

James B. Richmond, senior photographer since 1975, has been named a supervisor of photography in the ORNL Information Division.

Richmond, who joined Carbide in 1968, attended St. Bernard College, St. Bernard, Ala., and is a member of the Tennessee Professional Photographers and Professional Photographers of America.

Richmond previously taught photography at Knoxville Fulton High School and was employed by T. C. Smith Photography, Shreveport, La., and Thompson Photography, Inc., of Knoxville. He also spent four years as a photographer in the United States Air Force.

He and his wife, the former Davetta O'Quinn of Shreveport, live at 6612 Langston Drive, Knoxville. They have a son, Robert.

QA contest announced

As part of Quality Assurance (QA) Week, March 22-28, Division employees are invited to participate in a QA message contest to increase their awareness of quality assurance and its value in achieving Nuclear Division objectives.

Rules of the contest are that the QA message must:

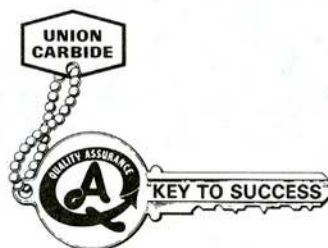
1. be original;
2. include the words "quality" and "assurance";
3. not exceed 10 words;
4. be signed; and
5. be received by the installation QA office by March 13, 1981.

Contest entries may be used in QA posters displayed throughout the Division.

The messages will be judged at each installation, and installation winners will be eligible for the UCC-ND Grand Award. Winners will be announced by plant bulletin and in a later issue of **Nuclear Division News**.

Each installation winner will be awarded a \$30 cash prize, and the Grand Award winner will receive \$150.

There is no limit to the number of entries an individual may submit. All Division employees are eligible except those persons whose names appear on the "Nuclear Division Quality Assurance Personnel" organizational chart.



QA Message Contest

Name _____ Organization _____

Plant mailing address _____ Plant phone _____

Your QA message(s) _____

Send to: QA MESSAGE...

Y-12 - Building 9212, MS-1A
ORNL (including ORNL divisions at Y-12) -
Building 2024, Room 207
ORGDP - Building K-1001, MS-124
PGDP - Building 0710, Room B-55

Save energy and money while doing laundry

Your automatic washer and dryer, valued for the time and effort they save, can also save energy and money if a few simple guidelines are observed.

Continuing their examination of energy use in the home, ORNL researchers have found that the laundry process, representing nearly 10 percent of household energy use and nearly two percent of the U.S. total, according to 1978 statistics, can be an important target for conservation.

For a more energy- and cost-efficient washday, they suggest these steps:

- Use a warm — not hot — water wash cycle.
- Always adjust the water level to the size of the load.

- Substitute a cold rinse for the warm water option.

- Dry only full loads.

The savings while only a few cents per load, are potentially very significant when multiplied over the nearly 60 million automatic washers in the U.S., each doing an average of 35 loads per month.

Cold water washing

The study shows that a warm water wash cycle can be more economical overall than cold water washing, since the gain represented by the latter's lower energy use can be more than offset by the increased quantity of detergent required.

Compared with a hot water cycle, the recommended warm water washing offers both an energy- and

cost-saving bonus, since hot water accounts for the bulk of the energy consumed by automatic washers.

An even more important energy-saving gain, however, can come from **not** using the warm rinse option on automatic washers. This could save 11 percent of the energy consumed in the residential laundry process. The most noticeable loss from substituting a cold rinse would be the negligible benefit of clothes feeling warmer as they are taken from the washer.

Eliminate warm rinse

The elimination of the warm water rinse option may be accomplished in the near future by voluntary industry action, the study points out. Several machines presently on the market no longer offer the warm rinse option.

The study, conducted by William P. Levins of ORNL's Energy Division, suggests that a built-in laundry-weighing scale, integrated with an accurate water level control, could help to ensure the most efficient use of heated water. Since most large washing machines have a rated capacity of 18 pounds, and the average wash load is about 6 pounds,

such a device would appear to be a sound investment for the consumer.

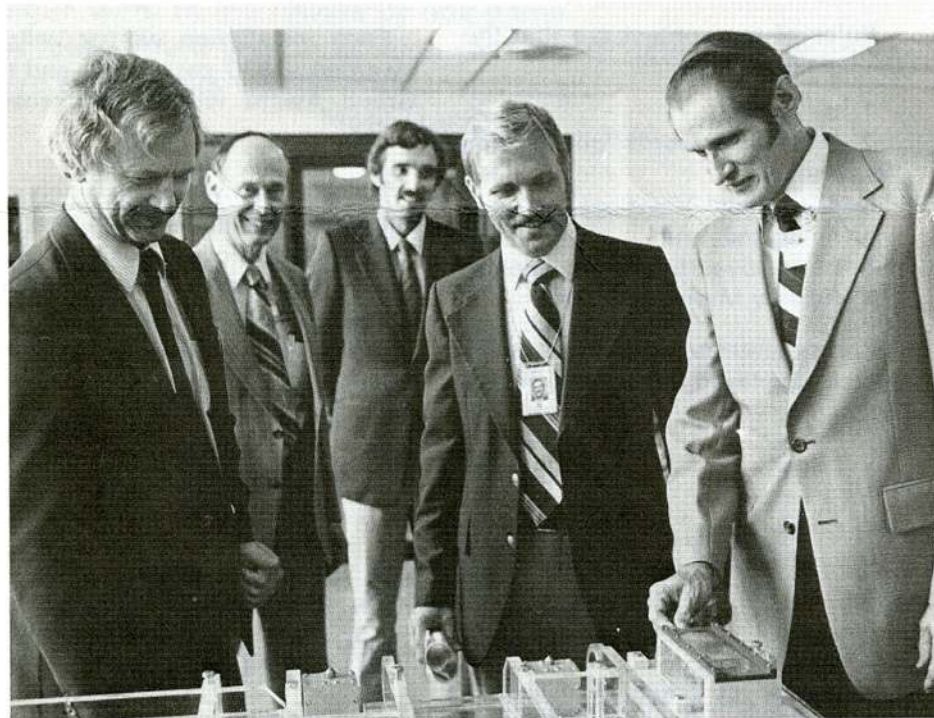
Seventy-eight percent of the homes with an automatic washer also have a dryer. Here, too, energy and dollar savings are possible.

Dryer efficiency

Dryer efficiency is highest at its design load and drops off above or below this point. Although the average dryer operates at about 55 percent efficiency, in most cases the dryer is operated at about one-third of rated capacity, losing much of its built-in efficiency. This suggests that most people purchase a dryer too large for their use. The study also recommends that standing pilots on gas dryers, which consume 40 percent of the gas, be replaced with intermittent ignition devices.

With an average service life for a new washer of 11 years and 13 years for a dryer, it is obvious that modern laundry equipment works quite well and probably will not change very much in the future. According to the study, that makes the human element — how the equipment is used — even more important in saving energy and costs in the laundry process.

Cunningham visits Oak Ridge



DURING A VISIT TO ORNL, DOE Assistant Secretary for Nuclear Energy George W. Cunningham (left) inspected the model of a remote modular shear being designed under the Consolidated Fuel Reprocessing Program, managed by ORNL for DOE. An integrated test of the shear and other major equipment components, together with a Remote Operation and Maintenance Demonstration of prototype equipment, are major upcoming milestones for the program. With Cunningham (from left) are Donald B. Trauger, ORNL associate director for nuclear and engineering technologies; Bill Danker, technical assistant to Cunningham; Wade Ballard, director, Fuel Cycle Division, in DOE's Office of Light Water Reactors; and William D. Burch, ORNL, director of the Consolidated Fuel Reprocessing Program.

Next issue...

The next issue will be dated March 12. The deadline is March 4.

Patents Granted

Richard J. Fox and Dimitrios C. Agouridis, both of ORNL, for "Cadmium Telluride Photovoltaic Radiation Detector."

Richard J. Fox, ORNL, for "Method for Making an Improved Magnetic Encoding Device."

Question Box

Must personal time off be explained?

QUESTION: I recently had to take some time off for extremely personal business. My supervisor insisted on knowing why. Am I forced to tell him?

ANSWER: In order for the Company to permit an individual to be absent from the job for personal reasons, the supervisor must have enough information to make a decision. It is not necessary for the employee to expound in great detail

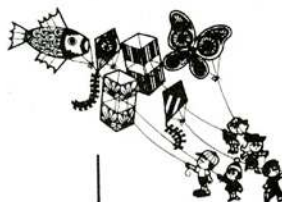
on matters of a sensitive nature. For example, it may be necessary for the employee to explain that his/her presence is required in court, but it is not normally necessary or appropriate for the supervisor to inquire into particular details of the court matter. Fragmented vacation might be a better choice if you would prefer to minimize any discussions with your supervisor.

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